



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

5000 OVERLOOK AVENUE, S.W., WASHINGTON, D.C. 20032

OFFICE OF THE GENERAL MANAGER

TEL: 202-787-2609

FAX: 202-787-2333

August 2, 2004

Karen D. Johnson (3WP32)
Chief, Safe Drinking Water Branch
United States Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Re: Administrative Order Submissions

Dear Ms. Johnson:

Pursuant to the Administrative Order For Compliance on Consent Docket No. SDWA-03-2004-0259DS, the District of Columbia Water and Sewer Authority ("WASA") hereby official submits the following:

- Pursuant to ¶63, a plan and schedule for updating materials evaluation of lead service line inventory
- Pursuant to ¶¶82 and 83, a prioritization plan for selecting 1000 lead services for replacement
- Pursuant to ¶83, a plan for encouraging homeowners to consent to full replacement of lead service lines

I certify under penalty of law that these documents and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my personal knowledge or my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment for knowing violations.

WASA looks forward to EPA's comments and approvals of the enclosed.

Sincerely,

John T. Dunn, PE
Interim Chief Engineer/Deputy General Manager

Enclosures

Inventory

USEPA – DCWASA ADMINISTRATIVE ORDER Consent Docket No. SDWA-03-2004-0259DS Paragraph 63: Submittal Requirements

A. Background:

Pursuant to EPA Administrative Order for Compliance, DCWASA hereby submits its plan and schedule for updating its inventory of lead service lines. This plan will:

1. Establish a baseline inventory of the estimated number of lead service lines in the DCWASA distribution system as of June 30, 2001 (June '01 Baseline Inventory).
2. Initially update the June '01 Baseline Inventory and submit to EPA by September 1, 2004. Update June '01 Baseline Inventory each September 1 thereafter by adding service lines that are identified by subsequent efforts to be lead and subtracting service lines that subsequently are identified as copper or brass. Based on the updates to the June '01 Baseline Inventory, recalculate the number of lead service lines to be replaced by September 30, 2004 and every September 30 thereafter.
3. DCWASA shall submit a plan to update its inventories, both the June '01 Baseline Inventory and the Current Inventory (Current Inventory includes replacements) of all service lines which will include the following:
 - a) A specific program to determine the construction material of those service lines that are presently listed as "unknown". WASA shall submit quarterly progress reports to EPA commencing December 1, 2004 on the determination of the unknowns. *correct date?*
 - b) A tracking program to identify all lead service lines that have been fully or partially replaced since June 30, 2001.
4. A plan for updating its materials evaluation of services to residences used for LCR sampling.

B. Proposed Plan:

The following items relate to similarly number items in Section A. above:

1. June '01 Baseline Inventory- WASA will revise the estimate of lead services to the baseline of June 30, 2001 by using the initial inventory established by DCWASA as of September 30, 2002 as a basis. The methodology for this inventory was documented in the 2003 Lead Service Report dated September 2003. That inventory will be adjusted by the addition of the number of lead

Review

What are actual #'s?

service lines replaced during the period June 30, 2001 and September 30, 2002. The revised June '01 Baseline Inventory will be submitted to EPA by September 1, 2004.

What does order pay?

2. Update of the June '01 Baseline Inventory-

- How is Order done?*
- a) Initial Update- DCWASA is updating its Customer Information System Database (CIS) for use as the service inventory database. This will be more fully described below. Because the update cannot be completed by September 1, 2004, WASA will provide a compilation of the database as it currently exists by this date.
 - b) By December 1, 2004 WASA plans to complete its CIS upgrade and by the second quarterly report (March 1, 2005) WASA will have entered information that has been collected since the beginning of the 2003 replacement program. Therefore, by March 1, 2005 WASA will update the June '01 Baseline Inventory by including all unknown service lines subsequently identified as lead, and by subtracting all lead lines subsequently identified as copper or other material.

3. Inventory Update

- a) DCWASA proposes the following approach to positively identify the materials of construction of unknown service lines:
 - i. Field determination of the materials of construction for 1,200 service lines currently listed as "unknown" will be undertaken during the 2005 replacement period (i.e. October 1, 2004 through September 30, 2005). The actual material of construction for these lines will be determined by no-dig or test pit technology. The identification will update our inventory and will also provide data that can be used for the assessment approach described below.
 - ii. DCWASA will replace 2,500 lead service lines during FY '05. Experience has shown that it will be necessary to test pit approximately 3,750 services in order locate 2,500 lead services. Thus material information on these 3,750 service lines will also be entered into the CIS. The service material information will also provide data that can be used to assess other unknown services as described below.
 - iii. DCWASA data from the FY'03 and FY'04 replacement programs will be entered into the CIS. WASA has replaced, or will replace 2,200 lead service lines. In implementing this program, WASA has dug, or will dig approximately 3,300 test pits to verify the 2,200 lead service lines. This information will be entered into CIS and
- 1600
1650*
- by when?*
- to this total universe?*
- by 10th?*

will be used to update our inventory. It will also be used to assess other unknown services as described below.

- iv. Using the 1,200 unknown material determinations, 3,750 material determinations from the 2005 program, and over 3,300 material determinations from the 2003 and 2004 programs, WASA will:

- Assess to what extent date of service is an accurate determiner of material
- Assess to what extent water test results (second draw) is an accurate determiner of material and to determine test level (concentration in ppb) that is the threshold indicator.
- Assess to what extent size of service is an accurate determiner of material

- v. WASA will analyze the data collected from these over 8,000 material determinations versus the potential positive determiners; water test results, age and size. Statistical correlations will be done using this data by August 1, 2005. Also by August 1, 2005 WASA will submit a plan to EPA to resolve the remaining unknown services not actually physically determined to that date.

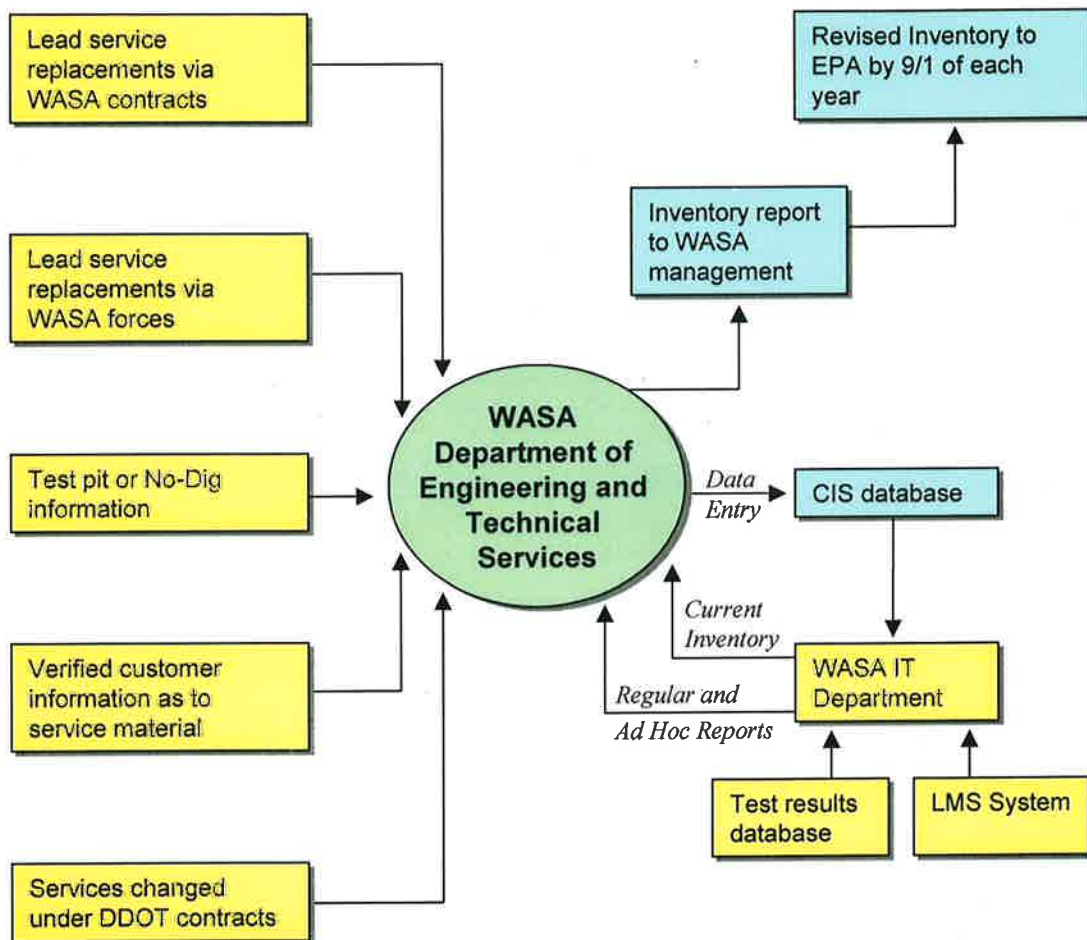
- b) DCWASA will use its Customer Information System (CIS) database to evaluate services presently listed as "unknown". As mentioned above, significant programming changes are necessary to accomplish this CIS modification and they will not be completed until December 1, 2004. The fields in this inventory are being expanded to facilitate the delineation of the materials of construction with respect to both the public and private sections of the service lines. In addition to the material information describe above, all verifiable information derived from other sources such as plumbers and from the District Department of Transportation road projects will be entered into the database. A schematic of this process is attached.

4. Materials Evaluation Used for Sampling

The Lead/Copper Rule requires 100 samples every six months. WASA has submitted its Lead and Copper Site Selection Criteria for 6-month Monitoring Periods that outlines rationale used for selection as well as the addresses selected for routine sampling. The material of the services for each address is listed in Appendix C, Table 2 of the statement of criteria previously submitted to EPA. The material determination is derived from WASA's current inventory of service material. WASA's plan for evaluating the material of the service for its routine monitoring is as follows:

1. For each address of the current list of addresses for routine monitoring WASA will positively confirm the material of the service from the main to the property line, and from the property line to the residence using the following:
 - a) Factual records
 - b) N-dig or test pit technology
 - c) A combination of 3.b) and 3.c). *is no*
2. WASA will report the results to EPA by January 1, 2005.
3. WASA will make any needed modifications to its site selection for routine monitoring based on the January report and will submit these for EPA approval as required by the regulations.

[Signature]



USEPA- DCWASA ADMINISTRATIVE ORDER
Consent Docket No. SDWA-03-2004-0259DS
Paragraphs 81 and 82 Submittal Requirements

prioritization
DOH consultation

A. Background:

Pursuant to Paragraphs 81 and 82 of the EPA Administrative Order for Compliance, DCWASA hereby submits its prioritization plan for selecting 1000 lead services for replacement in the time period October 1, 2004 through September 30, 2006. This Plan also addresses: documentation that WASA has consulted with DC DOH in developing its plan; and best efforts to obtain the consent of the property owners to allow WASA to replace the "full" lead service line at the property owner's expense.

fiscal

1. During the 2004 replacement year, WASA consulted extensively with the DC Department of Health and EPA regarding criteria for prioritizing lead service replacements. As a result, DC DOH, EPA and WASA adopted the following criteria:

- a) Criterion 1- Approximately 100* home day care centers with lead service lines;
- b) Criterion 2- Approximately 100* homes that have children with elevated blood lead levels and that have a lead service line or a service line of undetermined material;
- c) Criterion 3- Approximately 300* homes with high lead water levels that are occupied by members of the target population.
- d) Later discussions and correspondence with DC DOH defined the target population as:
 - i. Pregnant or nursing mothers
 - ii. Children under 6 years(Note: *Indicates these were initial estimates)

= 500

2. During calendar year 2004 WASA is replacing a minimum of 500 lead services following these criteria. After extensive coordination, the 2004 LSR program consists of:

- a) Criterion 1- WASA obtained a list of daycare centers from DC DOH and identified centers with lead and possible lead services. In total 228 daycare centers will be evaluated by test pitting to determine the material of the service. All lead services serving the identified daycare centers will be replaced prior to December 31, 2004.
- b) Criterion 2- WASA obtained a list of addresses identified by DC DOH as having high blood lead levels in children and matched that against our database of lead services and 217 addresses were identified for

are they evaluating all or just unknowns? possible which is 228?

HIPA? Medical Privacy

lead service replacement during calendar 2004. All lead services serving residences with children with high blood lead levels will be replaced prior to December 31, 2004.

- c) Criterion 3- WASA made significant efforts to identify the at risk customers (pregnant/nursing women and children under 6 years). In transmitting water sample test results, customers were supplied with a REQUEST FOR PRIORITY REPLACEMENT OF LEAD WATER SERVICE LINE IN PUBLIC SPACE form, copy attached. This form was also mailed to all customers that WASA's CIS system indicated a lead service, or where the service material was unknown. Furthermore, the form was available on WASA's website and could be filled out by our customer representatives who called our "Lead Hotline".

3. To meet its 2004 schedules, WASA set a deadline of April 30, 2004 for receipt of the priority replacement forms. WASA received 2707 forms by this date and entered all forms into a database (LMS System).

4. WASA then searched the database for all customers who identified themselves as at risk and whom also had lead service lines as indicated by our CIS system. WASA ranked the results by second draw test result and derived a list of 1500 customer addresses.

5. WASA intends to replace the lead service lines of the customers with the highest second draw test results prior to December 31, 2004.

B. Proposed Plan:

2 years
WASA intends to perform 1000 priority lead service replacements during the period October 1, 2004 through September 30, 2006. WASA plans to replace 500 priority lead services by September 30, 2005 and the remaining 500 priority lead services by September 30, 2006.

1. Criteria for 2005 Program Selection:

- a) Five hundred replacements will be selected by the criteria agreed to by DC DOH, EPA and WASA for the 2004 risk priority program.
- ① b) As the first priority WASA will endeavor to identify all customers who have children under 6 years with elevated blood lead levels (10 ug/dl or greater) and lead services that have not already been replaced under the 2004 program.
- c) WASA will request a list from DC DOH comprised of blood lead test data obtained by them since January 1, 2004.
- same ratios?
Dry care #s don't add up
No. job addresses

- not part of 'at risk' definition
does DOH license?
- d) WASA will also search its LMS System (database of the priority replacement form information) for all customers who have identified themselves as at risk by virtue of high blood lead test results.
 - ② e) As a second priority WASA, with assistance from DC DOH, will identify any day care centers that have begun operation since last year's evaluation and that may have lead service lines.
 - ③ f) The third priority group will be those "at risk". WASA will utilize the "at risk" list remaining from the 2004 program. That is, WASA will use the list of at risk addresses received prior to April 30, 2004 with priority given to the highest lead water test results. WASA estimates that approximately 500 addresses over the action level of 15 ppb will remain, after removing addresses replaced during 2004 via the 2004 priority program, and addresses removed from the list by virtue of replacement during the 2004 or 2005 block by block program.

2. Criteria for 2006 Program Selection:

- a) Five hundred (500) replacements will be selected by the criteria agreed to by DC DOH, EPA and DC WASA for the 2004 priority program.
- b) As the first priority any remaining or newly identified customers who have children under 6 years with elevated blood lead levels (10 ug/dl or greater) and lead services that have not already been replaced under the 2004 or 2005 programs.
- c) As the second priority, any remaining or newly identified day care centers that have begun operation and that may have lead service lines will be next.
- d) The third priority group will be those "at risk". WASA will use the "at risk" list from its LMS database of all applications received after April 30, 2004. WASA will rank all at risk addresses by second draw test results. It is anticipated that less than 500 addresses will remain who test above the action level. Many will have been replaced by the 2004 and 2005 priority and block by block programs.

TO: DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY (WASA)
SUBJECT: REQUEST FOR PRIORITY REPLACEMENT OF LEAD WATER SERVICE LINE IN
PUBLIC SPACE

This is a request for priority replacement of the lead water service line in public space.

1. Contact Information

Your Name: _____
Address: _____ Zip Code: _____
Phone: _____ (daytime) _____ (evening) _____ (cell)
Email: _____

CHECK ALL THOSE BOXES THAT APPLY BELOW

2. Needs – Use additional pages if necessary.

☐ Children are full-time residents at this address:
List each child by name and specify age:

☐ A full-time resident(s) at this address is pregnant or is a nursing mother.
Name: _____ Age: _____

☐ A full-time resident(s) at this address has specific health problems.
Provide name and description of health concern for each person.

3. Water Test Results

☐ My water was been tested by WASA in _____ (month) of _____ (year).
Provide a copy of the test results letter if available.

☐ My water was tested by an independent laboratory. You must enclose a copy of the lab's report for
this data to be considered.

Signature: _____ Date: _____

**Complete this form and mail to: DCWASA, Lead Services Priority Replacement Program
5000 Overlook Ave., SW, Washington, DC 20032**

Full replacement
approved

USEPA- DCWASA ADMINISTRATIVE ORDER
Consent Docket No. SDWA-03-2004-0259DS
Paragraph 83 Submittal Requirements

A. BACKGROUND

The District of Columbia Water and Sewer Authority's Board of Directors approved a resolution on May 6, 2004, which offered financing options for private lead service line replacements. The provisions of that resolution stated that the District of Columbia Water and Sewer Authority ("WASA") would collaborate with banking institutions to develop a program to offer below-market financing to qualified District homeowners, collaborate with Federal and District agencies to develop grant programs, and establish a simple rate structure for private lead service line replacements.

The resolution was subject to a formal ratemaking process because of the rate structure proposal, and the publication in the District of Columbia Municipal Register and public comment period were completed on June 27. On July 1, 2004, the Board gave its approval to the final resolution, and Resolution # 04-61 became effective upon final publication in the District of Columbia Municipal Register on July 9.

B. PROPOSED PLAN

Pursuant to the approval of this resolution, a summary of the programs that WASA has put into place follows.

1. *Below-Market Financing* – WASA's primary banking institution, Wachovia, is offering a low interest loan program for the customer portion of lead service replacements to our income eligible customers. This program became available to customers on July 20 at any Wachovia branch bank located in the District of Columbia. This program has been coordinated between the Finance and Budget Office and the Office of Public Affairs.

2. *DHCD Grants* – The District's Department of Housing and Community Development (DHCD) has implemented their grant program to offer up to \$5,000 to income eligible customers for replacing the private portion of their lead service lines. In order to advise our Customer Assistance Program customers regarding the availability of the DHCD grants, WASA's Customer Service Department is contacting these customers, who were previously notified that the public portion of their lead service line would be replaced, but who declined to complete work on the private portion. Going forward, WASA will include DHCD's flyer in the package that is sent to each customer whose service line is scheduled for replacement.

3. *Fixed Fee for Private Lead Water Service Line Replacements*: Resolution # 04-61, effective on July 9, established a fixed fee of \$100 per linear foot for exterior water service line replacement, and a flat fee of \$500 for inside work to the first threaded connection. WASA began offering this rate to customers on July 19. WASA anticipates

this streamlined process will help increase the number of customers who have their service lines replaced.

4. These programs will be incorporated into the Enhanced Public Education Plan. As part of the outreach, WASA will provide residents accurate and timely information by:

- Conducting press briefings
- Developing and distributing information to local press
- Expanding appearances on public affairs programs (radio/television)
- Continuing to issue press releases and hold press conferences to ensure residents receive the latest information
- Providing outreach to community and ethnic newspapers
- Updating web sites
- Sending direct communications to customers

feedback
success
measures